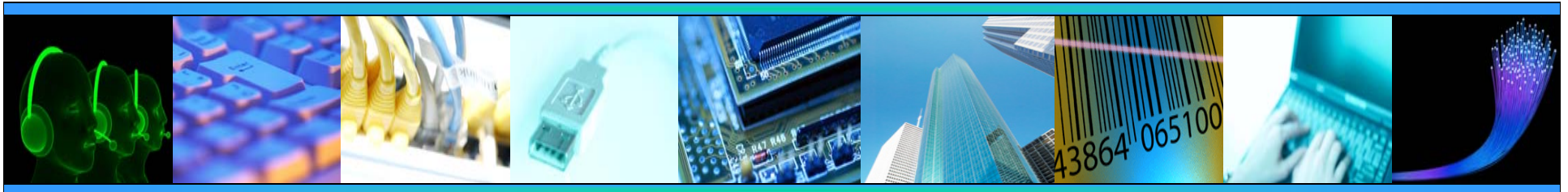# ADOPTED

FY 2011 – 2015

Technology Investment Plan

Executive Summary

What is the TIP ?

The Technology Investment Plan (TIP) is the City's Five (5)-Year Plan for
significant Information Technology (IT) Capital Investment, Replacement and Refresh
required for all citywide Infrastructure and Enterprise Application environments

It is updated based on citywide priorities,
continuous business re-alignment, technology development and is
re-forecast to adhere to the most current, best practices

All CTO departments submit Form As describing
TIP projects and asset replacement/refresh requirements;
identifying anticipated return on investment (ROI) and
potential impact to operating budgets (i.e. savings, maintenance, FTEs)
planning all necessary annual budgetary requirements

The TIP resembles the City's Capital Improvement Plan (CIP) in terms of organization and
recognizes, as does the CIP, that significant asset refresh and upgrades
and technology shifts are cyclical and generally
occur over the economic life of the assets

The TIP presents planned appropriations by department to be submitted for Council Approval.
Technology projects adhere to similar CIP project phasing
including Assessment, Design and Implementation

Oversight ?   Who manages the TIP ?

Technology Steering Committee (TSC)

Information Technology Department

Richard Lewis, Chief Information Officer & TSC Chair
Earl Lambert, Deputy Director, Citywide Chief Technology Officer
Gary Morris, Deputy Director, Citywide Infrastructure
Thomas Sorley, Deputy Director, Citywide Radio Communications
Mark Stinnett, Assistant Director, ITD Chief Technology Officer

| CTO Departments	Chief Technology Officers (CTOs)
Aviation	Matt Hyde
Fire	Patrick Plummer
Health and Human Services	Vernon Hunt
Houston Emergency Center	Al Garcia
Library	Ronald Stauss
Planning and Development	Max Samfield
Police	David Morgan
Public Works and Engineering	Olgilvie Gericke
Municipal Courts Administration	Rex Billings
Non-CTO or Other Departments / Divisions *	Mark Stinnett

* 3-1-1 Online Service Requests, Affirmative Action and Contract Compliance, City Secretary, Convention &
Entertainment, Finance, ARA, General Services, Housing, Human Resources, Information Technology,
Legal, Parks and Recreation and Solid Waste Management

3

What Guides the TIP ?
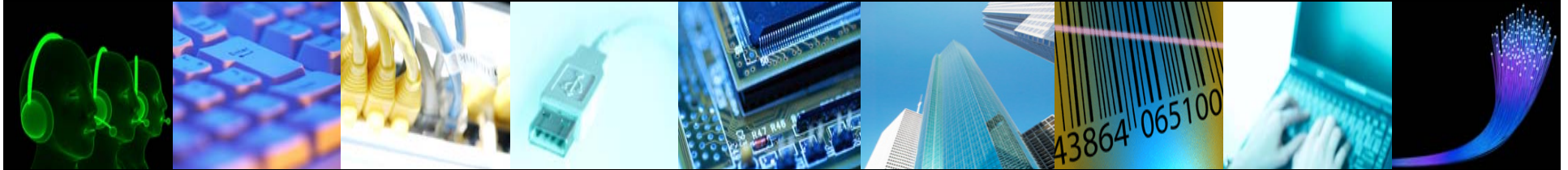
VISION

To be an information technology organization recognized for collaborative partnerships, proactive leadership, strategic innovation, and quality customer service.

MISSION

To improve the quality of services to our customers (citizens and employees) on a daily basis through cross-functional teamwork while minimizing operating expenses and improving the City's business processes.

VALUES

- Professional focus and initiative

- Invest in our employees

- Reward success and value lessons learned

- Expect high levels of productivity and excellence

- Operate with integrity to build trustful relationships and dependability

Pro-active Structure

Improve infrastructure, core business processes and provide effective citywide management structure
- Emphasize system simplicity
- Standardize enterprise architecture to reduce complexity
- Executive accountability
- Plan annual replacement requirements

Efficiency

Align IT resources with City business objectives and balance effectiveness / efficiency to:
- Reduce operating cost
- Limit growth to the workforce
- Improve services to citizens / employees

Security

Continuously strengthen IT security through Network Re-Design, Hardware/Software Enhancements, Multi-Layering Approaches, Policy and Procedure, and in the future, Mandatory Training/Testing, Incident Response, Regular Performance Assessments and Random Audits

Transparency

" Introducing the New TIP IMPACT System "
Allows CTOs to Enter and Update TIP Form As Online
Provides Direct Online Access to Employees and Citizens
Expedites Annual Budget Preparation and Review Processes
Enables more Efficient and Comprehensive Reporting
Provides an Automated Change Management System

How is the TIP Funded ?

MAJOR FUNDING SOURCES

Equipment Acquisition Funds (EAF)

The EAF portion of the TIP is short-term general obligation debt serviced by property tax revenue as part of the annual budget.

EAF involves the following 8 General Fund departments:

IT Consolidated EAF

Municipal Courts Admin (MCAD)

Houston Police (HPD)

Houston Fire (HFD)

Houston Emergency Center (HEC)

Public Works & Engineering (PWE)

Houston Public Library (HPL)

Health & Human Services (HHS)

Information Technology (IT)

Planning & Development (PD)

Enterprise, Special Revenue and Grant Funds

The Enterprise, Special Revenue and Grant portions of the TIP primarily use current revenue or prior year resources for technology investments from the departments / funds listed below:

Enterprise
Aviation (HAS)
PW&E (Public Utilities)
Convention & Entertainment Facilities (C&EF)

Special Revenue
PW&E (Building Inspection)
PW&E (Storm Water)
Municipal Courts Admin (Technology Fund)
Houston Emergency Center (HEC)

Grants
Houston Public Library (HPL)
Housing & Community Development (HCD)
Health & Human Services (HHS)

Executive Summary

Tier 1 – All Funding Sources

FUND	Through 2009	Estimated 2010	2011	2012	2013	2014	2015	2011-2015	Total
1800 IT Consolidated EQ Acquisition Fund (EAF)	**27,765**	**21,083**	**27,835**	**22,937**	**14,635**	**13,178**	**11,810**	**90,395**	**139,243**
2002 Health-Special Revenue Fund	-	0	0	190	0	0	0	190	190
2207 MCAD-Tech Special Revenue Fund	-	102	25	0	0	0	0	25	127
2301 PWE-Building Inspection Fund	-	-	1,607	695	118	50	50	2,520	2,520
5040 PWE-Other Government-Grant Funded	-	0	3,750	0	0	0	0	3,750	3,750
8001 HAS-Revenue Fund (Enterprise)	1,818	1,818	3,458	1,141	1,141	1,141	1,141	8,022	11,658
8012 HAS-AIF Capital Outlay Fund (Enterprise)	604	661	3,255	212	212	212	212	4,103	5,368
8300 PWE-W & S System Operating Fund	-	0	2,671	1,655	865	765	765	6,721	6,721
8305 PWE-Combined Util. Sys. Fund (Enterprise)	-	0	8,981	8,280	4,228	531	542	22,561	22,561
Radio-Anticipated Grants	-	0	1,764	20,754	7,409	0	0	29,927	29,927
Radio-Existing CIPs	3,324	2,742	2,800	0	25,135	0	0	27,935	34,001
Radio-Existing Grants	12,993	11,400	23,389	0	0	0	0	23,389	47,782
Radio-General Fund PIBs	-	0	0	0	9,623	0	0	9,623	9,623
GRANT TBD-HPD Port Authority-Mobile Data Project	-	0	3,620	0	0	0	0	3,620	3,620
Grand Total:	**46,504**	**37,806**	**83,155**	**55,864**	**63,366**	**15,877**	**14,520**	**232,781**	**317,091**

Department		Through 2009	Estimated 2010	2011	2012	2013	2014	2015	2011-2015	Total
TIP - Fire										
99-10-12-0010	FIRE-Incident Command & Control System			200					200	200
99-10-12-0011	FIRE-E-Forms and Workflow System			100	50	25			175	175
99-10-12-0013	FIRE-Server Virtualization and Consolidation		110	50	50	50			150	260
99-11-12-0025	Desktop Refresh - FIRE	819	56	95	200	200	200	273	968	1,843
	Total:	819	166	445	300	275	200	273	1,493	2,478
TIP - Health and Human Services										
99-11-38-0016	Desktop Refresh - HEALTH	437	223	142	156	76			374	1,034
	Total:	437	223	142	156	76	0	0	374	1,034
TIP - Houston Emergency Center										
99-07-15-0011	HEC-CAD Upgrade/Replacement	357		400	1,500	1,500	1,500	1,100	6,000	6,357
99-11-15-0033	Desktop Refresh - HEC	207	22	24	149	87	87	87	434	663
	Total:	564	22	424	1,649	1,587	1,587	1,187	6,434	7,020
TIP - Library										
99-07-34-0001	Desktop Refresh - HPL	414	131	332	663	400	400	369	2,164	2,709
	Total:	414	131	332	663	400	400	369	2164	2,709
TIP - Planning and Development										
99-07-70-0001	PLANNING-EGIS	1,250	162	400	430	500	500	500	2,330	3,742
99-11-70-0010	Desktop Refresh - Planning	34	7	4	11	24	11	7	57	98
	Total:	1,284	169	404	441	524	511	507	2,387	3,840
TIP - Police										
99-07-10-0002	HPD-Mobile Data Strategy			1,500	6,000				7,500	7,500
99-07-10-0003	HPD-Neighborhood Protection Case (NPC) Mgmt System	226	200	725	200	200	200	225	1,550	1,976
99-07-10-0010	HPD-Records Mgmt System (RMS)	7,258	4,882	2,250	3,500	3,500	3,500	2,000	14,750	26,890
99-11-10-0050	Desktop Refresh - HPD	1,684	396	379	1,434	1,200	1,200	1,200	5,413	7,493
	Total:	9,168	5,478	4,854	11,134	4,900	4,900	3,425	29,213	43,859
TIP - Public Works and Engineering										
20-11-20-3000	Desktop / Laptop Refresh - PWE (ENT, SR, EAF)	157	18	74	140	140	140	140	634	809
	Total:	157	18	74	140	140	140	140	634	809
TIP - Municipal Courts Administration										
99-10-16-0016	MCAD-ICMS HW Replacement/Refresh		225	100	65				165	390
99-10-16-0017	MCAD-CSMART - Municipal Courts Management System	250	6,560	3,000	3,000	1,250			7,250	14,060
99-10-16-0026	MCAD-Self Service Payment Kiosks			110	100	100	40		350	350
99-11-16-0030	MCAD-Desktop Refresh	199	61	62	150	150	150	165	677	937
99-11-16-0032	MCAD-Collection Module			155					155	155
	Total:	449	6,846	3,427	3,315	1,500	190	165	8,597	15,892
TIP - Information Technology										
99-07-68-0001	IT-INFRA-UCS PBX	1,200	800	500	1,000	1,000	1,000	494	3,994	5,994
99-07-68-0002	IT-INFRA-Active Directory& Exchange Migration	6,962	3,166	1,426					1,426	11,554
99-07-68-0003	IT-Server Storage/SAN Asset Replacement	937	475	1,150	1,000	1,000	1,000	1,000	5,150	6,562
99-07-68-1001	IT-APPS-Call Center (3-1-1 Refresh)	1,633	520	1,000	250	250			1,500	3,653
99-09-09-6899	IT-INFRA-Network Replacement	300	625	1,000	1,000	1,000	1,500	1,500	6,000	6,925
99-09-65-0003	IT-APPS-ARA-1-Stop Permitting	697		500	300	200			1,000	1,697
99-09-68-1009	ITD-ERP-SAP Business Intelligence	1,143	1,664	915					915	3,722
99-10-68-2016	IT-INFRA-Data Center & Server Transformation		342	1,000	1,000	1,000	1,000	2,000	6,000	6,342
99-11-65-0010	Automated Time & Attendance System (Kronos)			8,354					8,354	8,354
99-11-68-1100	IT-INFRA-Desktop Refresh-ITD & NON-CTO Depts	1,601	438	1,888	589	783	750	750	4,760	6,799
	Total:	14,473	8,030	17,733	5,139	5,233	5,250	5,744	39,099	61,602
	Grand Total:	27,765	21,083	27,835	22,937	14,635	13,178	11,810	90,395	139,243
	Annual Citywide Standard IT A/R Refresh ONLY Total:	9,979	4,107	7,200	8,357	7,860	7,938	7,085	38,440	52,526

ADOPTED AUGUST 2010

MAJOR ONGOING CITYWIDE TIP PROJECTS

Case Management System (CSMART)

Design and implement a new custom CMS in-house to manage 1.2m new cases processed annually by Houston Municipal Courts based on a Service Oriented Architecture and Microsoft development tools. ($15-20m)

Benefits:
- Automate labor intensive work
- Reduce citizen and officer time spent in court
- Increase Revenues
- Control long-term system maintenance costs
- Decrease system downtime

Radio Communications System

The existing Radio systems have reached the end of their useful life and must be replaced. This project will replace existing radio systems with a reliable, effective and efficient "state of the art" system to improve Citywide communications, provide for inter-agency operability between City, County, Regional, State and Federal agencies. ($120m)

Records Management System (RMS) and MDS "Office in Vehicle"

Decommission the mainframe/data center and move to a client server environment. Deploy next generation technologies in vehicles providing electronic transmission of documents, i.e. reports, citations, etc., to increase productivity, efficiency and improve public safety to citizens.

The Mobile Data Strategy (MDS) leverages commercial air card technologies and the City's evolving broadband wireless capabilities to provide significantly more data to field officers. ($45m)

Automated Time and Attendance System (ATAS)

The ATAS will allow the City to centralize and track the attendance and pay for all City employees. It will fully automated time and attendance and includes the software licensing, system hosting, application development and implementation services. Deliverables include Multiple T&A devices, Application Hosting, SAP Interface, Education/Training and ongoing maintenance ($13m)

ROI = $30.3m over 5 years

8

City of Houston - Information Technology Department
ADOPTED FY11-15 Technology Investment Plan (TIP)
Tier 1 - IT Consolidated EAF (1800) Only By Dept By Project or A/R

Department		Through 2009	Estimated 2010	2011	2012	2013	2014	2015	2011-2015	Total
TIP - Fire										
99-10-12-0010 FIRE-Incident Command & Control System				200					200	200
99-10-12-0011 FIRE-E-Forms and Workflow System				100	50	25			175	175
99-10-12-0013 FIRE-Server Virtualization and Consolidation			110	50	50	50			150	260
99-11-12-0025 Desktop Refresh - FIRE		819	56	95	200	200	200	273	968	1,843
	Total:	819	166	445	300	275	200	273	1,493	2,478
TIP - Health and Human Services										
99-11-38-0016 Desktop Refresh - HEALTH		437	223	142	156	76			374	1,034
	Total:	437	223	142	156	76	0	0	374	1,034
TIP - Houston Emergency Center										
99-07-15-0011 HEC-CAD Upgrade/Replacement		357		400	1,500	1,500	1,500	1,100	6,000	6,357
99-11-15-0033 Desktop Refresh - HEC		207	22	24	149	87	87	87	434	663
	Total:	564	22	424	1,649	1,587	1,587	1,187	6,434	7,020
TIP - Library										
99-07-34-0001 Desktop Refresh - HPL		414	131	332	663	400	400	369	2,164	2,709
	Total:	414	131	332	663	400	400	369	2164	2,709
TIP - Planning and Development										
99-07-70-0001 PLANNING-EGIS		1,250	162	400	430	500	500	500	2,330	3,742
99-11-70-0010 Desktop Refresh - Planning		34	7	4	11	24	11	7	57	98
	Total:	1,284	169	404	441	524	511	507	2,387	3,840
TIP - Police										
99-07-10-0002 HPD-Mobile Data Strategy				1,500	6,000				7,500	7,500
99-07-10-0003 HPD-Neighborhood Protection Case (NPC) Mgmt System		226	200	725	200	200	200	225	1,550	1,976
99-07-10-0010 HPD-Records Mgmt System (RMS)		7,258	4,882	2,250	3,500	3,500	3,500	2,000	14,750	26,890
99-11-10-0050 Desktop Refresh - HPD		1,684	396	379	1,434	1,200	1,200	1,200	5,413	7,493
	Total:	9,168	5,478	4,854	11,134	4,900	4,900	3,425	29,213	43,859
TIP - Public Works and Engineering										
20-11-20-3000 Desktop / Laptop Refresh - PWE (ENT, SR, EAF)		157	18	74	140	140	140	140	634	809
	Total:	157	18	74	140	140	140	140	634	809
TIP - Municipal Courts Administration										
99-10-16-0016 MCAD-ICMS HW Replacement/Refresh			225	100	65				165	390
99-10-16-0017 MCAD-CSMART - Municipal Courts Management System		250	6,560	3,000	3,000	1,250			7,250	14,060
99-10-16-0026 MCAD-Self Service Payment Kiosks				110	100	100	40		350	350
99-11-16-0030 MCAD-Desktop Refresh		199	61	62	150	150	150	165	677	937
99-11-16-0032 MCAD-Collection Module				155					155	155
	Total:	449	6,846	3,427	3,315	1,500	190	165	8,597	15,892
TIP - Information Technology										
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99-07-68-0002 IT-INFRA-Active Directory& Exchange Migration		6,962	3,166	1,426					1,426	11,554
99-07-68-0003 IT-Server Storage/SAN Asset Replacement		937	475	1,150	1,000	1,000	1,000	1,000	5,150	6,562
99-07-68-1001 IT-APPS-Call Center (3-1-1 Refresh)		1,633	520	1,000	250	250			1,500	3,653
99-09-09-6899 IT-INFRA-Network Replacement		300	625	1,000	1,000	1,000	1,500	1,500	6,000	6,925
99-09-65-0003 IT-APPS-ARA-1-Stop Permitting		697		500	300	200			1,000	1,697
99-09-68-1009 ITD-ERP-SAP Business Intelligence		1,143	1,664	915					915	3,722
99-10-68-2016 IT-INFRA-Data Center & Server Transformation			342	1,000	1,000	1,000	1,000	2,000	6,000	6,342
99-11-65-0010 Automated Time & Attendance System (Kronos)				8,354					8,354	8,354
99-11-68-1100 IT-INFRA-Desktop Refresh-ITD & NON-CTO Depts		1,601	438	1,888	589	783	750	750	4,760	6,799
	Total:	14,473	8,030	17,733	5,139	5,233	5,250	5,744	39,099	61,602
	Grand Total:	27,765	21,083	27,835	22,937	14,635	13,178	11,810	90,395	139,243
	Annual Citywide Standard IT A/R Refresh ONLY Total:	9,979	4,107	7,200	8,357	7,860	7,938	7,085	38,440	52,526
	Annual Citywide Standard IT DESKTOP REFRESH ONLY Total:	5,552	1,352	3,000	3,492	3,060	2,938	2,991	15,481	22,385

(Includes Annual MS ELA $1.5m in ITD)

City of Houston - Information Technology Department
ADOPTED FY11-15 Technology Investment Plan (TIP)
Tier 1 - IT Consolidated EAF (1800) Only By Dept By CITYIDE A/R DESKTOP REFRESH ONLY

Department		Through 2009	Estimated 2010	2011	2012	2013	2014	2015	2011-2015	Total
TIP - Fire										
99-11-12-0025 Desktop Refresh - FIRE		819	56	95	200	200	200	273	968	1,843
	Total:	819	56	95	200	200	200	273	968	1,843
TIP - Health and Human Services										
99-11-38-0016 Desktop Refresh - HEALTH		437	223	142	156	76			374	1,034
	Total:	437	223	142	156	76	0	0	374	1,034
TIP - Houston Emergency Center										
99-11-15-0033 Desktop Refresh - HEC		207	22	24	149	87	87	87	434	663
	Total:	207	22	24	149	87	87	87	434	663
TIP - Library										
99-07-34-0001 Desktop Refresh - HPL		414	131	332	663	400	400	369	2,164	2,709
	Total:	414	131	332	663	400	400	369	2164	2,709
TIP - Planning and Development										
99-11-70-0010 Desktop Refresh - Planning		34	7	4	11	24	11	7	57	98
	Total:	34	7	4	11	24	11	7	57	98
TIP - Police										
99-11-10-0050 Desktop Refresh - HPD		1,684	396	379	1,434	1,200	1,200	1,200	5,413	7,493
	Total:	1,684	396	379	1,434	1,200	1,200	1,200	5,413	7,493
TIP - Public Works and Engineering										
20-11-20-3000 Desktop / Laptop Refresh - PWE (ENT, SR, EAF)		157	18	74	140	140	140	140	634	809
	Total:	157	18	74	140	140	140	140	634	809
TIP - Municipal Courts Administration										
99-11-16-0030 MCAD-Desktop Refresh		199	61	62	150	150	150	165	677	937
	Total:	199	61	62	150	150	150	165	677	937
TIP - Information Technology *										
99-11-68-1100 IT-INFRA-Desktop Refresh-ITD & NON-CTO Depts		1,601	438	1,888	589	783	750	750	4,760	6,799
	Total:	1,601	438	1,888	589	783	750	750	4,760	6,799
	Grand Total:	**5,552**	**1,352**	**3,000**	**3,492**	**3,060**	**2,938**	**2,991**	**15,481**	**22,385**

* (Includes Annual MS ELA $1.5m in ITD)

Project:	FLIGHT INFORMATION DISPLAY SYSTEM (FIDS)	Category:	Asset Replacement (A/R)	Tier 1	(ADOPTED)
		Project Manager:	Ulf Lueders	WBS #:	
		Revision Date:	5/19/2010	TIP #:	28-07-28-0001

Description: The Houston Airport System is embarking on a replacement and update of the Flight Information Display System. The FIDS PC's are operating 24/7/365. It is not feasible to keep those PC's past their warranty expiration period. There are approximately 350 PC's in existence today and about 1,000 monitors of varying sizes and abilities. The capabilities of the systems and software driving them are increasing exponentially. This leads to a rather precarious questimation of requirements for the next 5 years. PC's driving the system will be low end server class models. They will require multi channel video cards and operate on a server OS.

Benefits/ROI: HAS provides public information to clients, customers and staff alike with the Flight Information Display System. A well working system is the first and last thing a visitor to Houston sees. It is important to have the equipment working properly at all times.

Operational and Maintenance Costs: ($ Thousands)

	2011	2012	2013	2014	2015
Personnel					
Supplies					
Svcs. & Chgs.					
Capital Outlay					
Property Mgmt.					
Total					
FTEs					

Project Allocation	Thru 2009	Est 2010	Fiscal Year Planned Appropriations					FY11-FY15	Project Total
			2011	2012	2013	2014	2015		
Assessment									
Design									
Implementation	600	600	2,425	243	243	243	243	3,397	4,597
Total Allocations	600	600	2,425	243	243	243	243	3,397	4,597
Source of Funds									
8001 HAS-Revenue Fund (Enterprise)	600	600	2,425	243	243	243	243	3,397	4,597
Total Funds	600	600	2,425	243	243	243	243	3,397	4,597

Project:	SERVER		**Category:**	Asset Replacement (A/R)	Tier 1	(ADOPTED)
	GENERAL SERVER ATTRITION REPLACEMENT		**Project Manager:**	Mark Zeringue	**WBS #:**	
			Revision Date:	5/19/2010	**TIP #:** 28-07-28-0002	

Description:	Replace oldest servers following a 3-4 year plan.		**Operational and Maintenance Costs: ($ Thousands)**					
				2011	2012	2013	2014	2015
			Personnel					
			Supplies					
Benefits/ROI:	Current hardware provides the best platform to maintain high		Svcs. & Chgs.					
	availability and stability.		Capital Outlay					
			Property Mgmt.					
			Total					
			FTEs					

Project Allocation	**Thru 2009**	**Est 2010**	**Fiscal Year Planned Appropriations**					**FY11-FY15**	**Project Total**
			2011	**2012**	**2013**	**2014**	**2015**		
Assessment									
Design									
Implementation	60	117	134	134	134	134	134	670	847
Total Allocations	60	117	134	134	134	134	134	670	847
Source of Funds									
8001 HAS-Revenue Fund (Enterprise)	60	60	88	88	88	88	88	440	560
8012 HAS-AIF Capital Outlay Fund (Enterprise)		57	46	46	46	46	46	230	287
Total Funds	60	117	134	134	134	134	134	670	847

Project:	MS-EA			**Category:**	Asset Replacement (A/R)		Tier 1		(ADOPTED)
	MICROSOFT ENTERPRISE AGREEMENT			**Project Manager:**	Matt Hyde		**WBS #:**		
				Revision Date:	5/19/2010		**TIP #:** 28-07-28-0003		

Description: MS-EA software assurance planned at 10% annually.

Operational and Maintenance Costs: ($ Thousands)

	2011	2012	2013	2014	2015
Personnel					
Supplies					
Svcs. & Chgs.					
Capital Outlay					
Property Mgmt.					
Total					
FTEs					

Benefits/ROI: Maintaining MS-EA will reduce software licensing costs and potential licensing risks due to non-compliance.

Project Allocation	**Thru 2009**	**Est 2010**	**Fiscal Year Planned Appropriations**					**FY11-FY15**	**Project Total**
			2011	**2012**	**2013**	**2014**	**2015**		
Assessment									
Design									
Implementation	470	470	470	335	335	335	335	1,810	2,750
Total Allocations	470	470	470	335	335	335	335	1,810	2,750
Source of Funds									
8001 HAS-Revenue Fund (Enterprise)	470	470	470	335	335	335	335	1,810	2,750
Total Funds	470	470	470	335	335	335	335	1,810	2,750

2011-2015 TECHNOLOGY INVESTMENT PLAN ($ Thousands)   CITY OF HOUSTON - TIP - Aviation

Project:	VM WARE	Category:	Asset Replacement (A/R)	Tier 1		(ADOPTED)
	VM WARE INFRASTRUCTURE (DUPLICATE DATA CENTER)	Project Manager:	Mark Zeringue	WBS #:		
		Revision Date:	5/19/2010	TIP #:	28-07-28-0005	

Description:	Create a clustered fault-tolerant server environment based on VMWARE which is duplicated to another Data Center for disaster recovery. Deploy multiple high performance servers with Storage Area Network (SAN) running VM Ware's Infrastructure 3.

Operational and Maintenance Costs: ($ Thousands)

	2011	2012	2013	2014	2015
Personnel					
Supplies					
Svcs. & Chgs.					
Capital Outlay					
Property Mgmt.					
Total					
FTEs					

Benefits/ROI: Reduce hardware platforms. VMs run across multiple servers pooling hardware resources to increase performance. Quick and easy to expand new hardware, or add new VMs when needed. High availability and easy to upgrade hardware.

Project Allocation	Thru 2009	Est 2010	Fiscal Year Planned Appropriations					FY11- FY15	Project Total
			2011	2012	2013	2014	2015		
Assessment									
Design									
Implementation	100	100	100	100	100	100	100	500	700
Total Allocations	100	100	100	100	100	100	100	500	700
Source of Funds									
8001 HAS-Revenue Fund (Enterprise)	100	100	100	100	100	100	100	500	700
Total Funds	100	100	100	100	100	100	100	500	700

2011-2015 TECHNOLOGY INVESTMENT PLAN ($ Thousands)   **CITY OF HOUSTON - TIP - Aviation**

Project:	CISCO	**Category:**	Asset Replacement (A/R)	Tier 1	(ADOPTED)
	CISCO 5-YEAR SPENDING FORECAST	**Project Manager:**	Matt Hyde	**WBS #:**	
		Revision Date:	5/19/2010	**TIP #:** 28-07-28-0007	

Description:	Number of core devices remains constant. Number of edge devices grows at 5% annually. Includes Smartnet under the Enterprise Funds section. Replace core network devices at MDF room throughout HAS campuses.	**Operational and Maintenance Costs: ($ Thousands)**				
			2011	2012	2013	2014	2015

		2011	2012	2013	2014	2015
Benefits/ROI:	Personnel					
Maintain current equipment with Smartnet maintenance/support reduces downtime risks and loss of productivity due to system unavailability.	Supplies					
	Svcs. & Chgs.					
	Capital Outlay					
	Property Mgmt.					
	Total					
	FTEs					

Project Allocation	**Thru 2009**	**Est 2010**	**Fiscal Year Planned Appropriations**					**FY11-FY15**	**Project Total**
			2011	**2012**	**2013**	**2014**	**2015**		
Assessment									
Design									
Implementation	897	897	206	206	206	206	206	1,030	2,824
Total Allocations	897	897	206	206	206	206	206	1,030	2,824
Source of Funds									
8001 HAS-Revenue Fund (Enterprise)	293	293	40	40	40	40	40	200	786
8012 HAS-AIF Capital Outlay Fund (Enterprise)	604	604	166	166	166	166	166	830	2,038
Total Funds	897	897	206	206	206	206	206	1,030	2,824

2011-2015 TECHNOLOGY INVESTMENT PLAN ($ Thousands)

CITY OF HOUSTON - TIP - Aviation

Project:	DESKTOPS	**Category:**	Asset Replacement (A/R)	Tier 1	(ADOPTED)
	DESKTOP/LAPTOP REPLACEMENT/ROTATION FORECAST	**Project Manager:**	Matt Hyde	**WBS #:**	
		Revision Date:	5/19/2010	**TIP #:** 28-07-28-0008	

| **Description:** | We currently have 1,000 desktops and 75 laptops, with a growth rate of 5% annually Our replacement schedule is based on a 4-year rotation | **Operational and Maintenance Costs: ($ Thousands)** | | | | | |

			2011	2012	2013	2014	2015
Benefits/ROI:	To ensure that all employees who use computing resources have access to a computer of sufficient capability to support basic computing needs in fulfillment of their work responsibilities.	Personnel					
		Supplies					
		Svcs. & Chgs.					
		Capital Outlay					
		Property Mgmt.					
		Total					
		FTEs					

| **Project Allocation** | **Thru 2009** | **Est 2010** | **Fiscal Year Planned Appropriations** | | | | | **FY11-FY15** | **Project Total** |
			2011	**2012**	**2013**	**2014**	**2015**		
Assessment									
Design									
Implementation	295	295	335	335	335	335	335	1,675	2,265
Total Allocations	295	295	335	335	335	335	335	1,675	2,265
Source of Funds									
8001 HAS-Revenue Fund (Enterprise)	295	295	335	335	335	335	335	1,675	2,265
Total Funds	295	295	335	335	335	335	335	1,675	2,265

TIP Tier equals 'Tier 1';

Adopted TIP

Form A

Project:	FIRE-Incident Command & Control System			Category:	Project (P)		Tier 1	(ADOPTED)

Project Manager:	Patrick Plummer	WBS #: TBD
Revision Date:	1/14/2010	TIP #:　99-10-12-0010

Description:	Drastically improve incident management; assist commanders in the field with tracking of personnel and assets to more effectively saves lives and property.		**Operational and Maintenance Costs: ($ Thousands)**					
				2011	2012	2013	2014	2015
			Personnel					
			Supplies					
Benefits/ROI:	An automated system allows for decreased response times to control a fire and reduces the life-threatening risks to HFD personnel through better communication and tracking. (Service Improvement, Risk Avoidance)		Svcs. & Chgs.		25	25	25	25
			Capital Outlay					
			Property Mgmt.					
			Total		25	25	25	25
			FTEs					

Project Allocation	Thru 2009	Est 2010	Fiscal Year Planned Appropriations					FY11- FY15	Project Total
			2011	2012	2013	2014	2015		
Assessment									
Design									
Implementation			200					200	200
Total Allocations			200					200	200
Source of Funds									
1800 IT Consolidated EQ Acquisition Fund (EAF)			200					200	200
Total Funds			200					200	200

Project:	FIRE-E-Forms and Workflow System			**Category:**	Project (P)		Tier 1	(ADOPTED)
				Project Manager:	Patrick Plummer		**WBS #: TBD**	
				Revision Date:	1/14/2010		**TIP #: 99-10-12-0011**	

Description:	HFD has over 130 manual forms and workflows across Emergency Ops, HR, F&A that are not electronic, cannot be queried/analyzed, and require thousands of man-hours each year to manage. Moving to a workflow system will streamline this process, increasing productivity, improving business information	**Operational and Maintenance Costs: ($ Thousands)**				
			2011	2012	2013	2014	2015
		Personnel					
		Supplies					
Benefits/ROI:	The system will speed up business processes, reduce errors, and improve executive's ability to track trends for better management. It will decrease admin costs for these processes. (Service Improvement, Expenditure Decrease)	Svcs. & Chgs.					
		Capital Outlay					
		Property Mgmt.					
		Total					
		FTEs					

Project Allocation	**Thru 2009**	**Est 2010**	**Fiscal Year Planned Appropriations**					**FY11-FY15**	**Project Total**
			2011	**2012**	**2013**	**2014**	**2015**		
Assessment									
Design			50					50	50
Implementation			50	50	25			125	125
Total Allocations			100	50	25			175	175
Source of Funds									
1800 IT Consolidated EQ Acquisition Fund (EAF)			100	50	25			175	175
Total Funds			100	50	25			175	175

Project:	FIRE-Server Virtualization and Consolidation			**Category:**	Asset Replacement (A/R)	Tier 1		(ADOPTED)

Project Manager:	Tracie Watkins	**WBS #:** TBD
Revision Date:	1/14/2010	**TIP #:** 99-10-12-0013

Description:	HFD has over 25 servers spread across various data centers. Server virtualization is an industry best-practice which allows efficient use of existing resources, reduces maintenance costs and downtime and improves services. This project consists of the investment in hardware and software to consolidate data centers.

Operational and Maintenance Costs: ($ Thousands)

	2011	2012	2013	2014	2015
Personnel					
Supplies					
Svcs. & Chgs.					
Capital Outlay					
Property Mgmt.					
Total					
FTEs					

Benefits/ROI:	The result will be better utilization of equipment, faster provisioning for new applications, decreased downtime, increased performance. Cost reduction is through decreased admin time, reduced need for hardware. (Service Improvement, Avoids Costs, Risk Avoidance)

Project Allocation	**Thru 2009**	**Est 2010**	**Fiscal Year Planned Appropriations**					**FY11-FY15**	**Project Total**
			2011	**2012**	**2013**	**2014**	**2015**		
Assessment									
Design		35							35
Implementation		75	50	50	50			150	225
Total Allocations		110	50	50	50			150	260
Source of Funds									
1800 IT Consolidated EQ Acquisition Fund (EAF)		110	50	50	50			150	260
Total Funds		110	50	50	50			150	260

Project:	Desktop Refresh - FIRE			**Category:**	Asset Replacement (A/R)		Tier 1		(ADOPTED)
				Project Manager:	Tracie Watkins		**WBS #: V-1800-2011-03**		
				Revision Date:	6/30/2010		**TIP #:　99-11-12-0025**		

Description:	Annual refresh of 20% of legacy desktops and servers in the 5 year refresh plan.	**Operational and Maintenance Costs: ($ Thousands)**				
			2011	2012	2013	2014	2015
		Personnel					
		Supplies					
Benefits/ROI:	Reduces risk of failure of equipment. Improves services and capacity by replacing the oldest 20 percent of equipment with modern equipment.	Svcs. & Chgs.					
		Capital Outlay					
		Property Mgmt.					
		Total					
		FTEs					

Project Allocation	**Thru 2009**	**Est 2010**	**Fiscal Year Planned Appropriations**					**FY11-FY15**	**Project Total**
			2011	**2012**	**2013**	**2014**	**2015**		
Assessment									
Design									
Implementation	819	56	95	200	200	200	273	968	1,843
Total Allocations	819	56	95	200	200	200	273	968	1,843
Source of Funds									
1800 IT Consolidated EQ Acquisition Fund (EAF)	819	56	95	200	200	200	273	968	1,843
Total Funds	819	56	95	200	200	200	273	968	1,843

TIP Tier equals 'Tier 1';

2011-2015 TECHNOLOGY INVESTMENT PLAN ($ Thousands)

CITY OF HOUSTON - TIP - Health and Human Services

Project:	Desktop Refresh - HEALTH	Category:	Asset Replacement (A/R)	Tier 1	(ADOPTED)
		Project Manager:	Vernon Hunt	WBS #: V-1800-2011-03	
		Revision Date:	6/30/2010	TIP #: 99-11-38-0016	

Description:	Evaluate technology fixed assets that are contained within the department. Replace fully depreciated assets.	Operational and Maintenance Costs: ($ Thousands)					
			2011	2012	2013	2014	2015
		Personnel					
		Supplies					
Benefits/ROI:	Identify, remove and replace all obsolete information technology assets. Provide new asset values and provide a newer more powerful operating environment to maximize efficiency of new ERP and network upgrades.	Svcs. & Chgs.					
		Capital Outlay					
		Property Mgmt.					
		Total					
		FTEs					

Project Allocation	Thru 2009	Est 2010	Fiscal Year Planned Appropriations					FY11- FY15	Project Total
			2011	2012	2013	2014	2015		
Assessment									
Design									
Implementation	437	223	142	156	76			374	1,034
Total Allocations	437	223	142	156	76			374	1,034
Source of Funds									
1800 IT Consolidated EQ Acquisition Fund (EAF)	437	223	142	156	76			374	1,034
Total Funds	437	223	142	156	76			374	1,034

Project:	HEC-CAD Upgrade/Replacement				Category:	Asset Replacement (A/R)	Tier 1		(ADOPTED)
					Project Manager:	Jon Titus	WBS #: X-150011		
					Revision Date:	6/30/2010	TIP #: 99-07-15-0011		

Description: The current CAD system is in its 7th year of operation. While operationally viable and perfroming at an acceptable level, the application is technically dated and the enhancements are very costly. An upgrade to the incumbent vendor's newer product line will provide additional capabilities, while preserving the customizations made through the current system's $10M+ investment which was made in 2001-2003 time frame.

Benefits/ROI: Risk Avoidance- Preclude the risk of system failure as the software and hardware of the current system ages.

Service Improvement - the CAD upgrade will improve the functionality delviered to Fire and Police dispatchers through the implementation of newer technology.

Expenditure Decrease/Avoids Cost - we expect to realize a slight decrease in the annual 3rd party maintenance expenditures due to the new products more modern design.

Operational and Maintenance Costs: ($ Thousands)

	2011	2012	2013	2014	2015
Personnel					
Supplies					
Svcs. & Chgs.			1,000	1,000	1,000
Capital Outlay					
Property Mgmt.					
Total			1,000	1,000	1,000
FTEs			2.00	2.00	2.00

Project Allocation	Thru 2009	Est 2010	Fiscal Year Planned Appropriations					FY11-FY15	Project Total
			2011	2012	2013	2014	2015		
Assessment	357		400					400	757
Design				1,500				1,500	1,500
Implementation					1,500	1,500	1,100	4,100	4,100
Total Allocations	357		400	1,500	1,500	1,500	1,100	6,000	6,357
Source of Funds									
1800 IT Consolidated EQ Acquisition Fund (EAF)	357		400	1,500	1,500	1,500	1,100	6,000	6,357
Total Funds	357		400	1,500	1,500	1,500	1,100	6,000	6,357

Project:	Desktop Refresh - HEC				Category:	Asset Replacement (A/R)		Tier 1		(ADOPTED)
					Project Manager:	David Folkers		WBS #: V-1800-2011-03		
					Revision Date:	6/30/2010		TIP #: 99-11-15-0033		

Description:	Annual asset replacement of HEC PCs in support of the call floor, HEC administrative users as well as Office of Emergency Management Emergency Operations Center (EOC) and OEM administrative users. Mix of devices is 90% PC, 10% laptop.	**Operational and Maintenance Costs: ($ Thousands)**				
			2011	2012	2013	2014	2015
		Personnel					
		Supplies					
Benefits/ROI:	Risk Avoidance - due to 24 x7 usage of call floor PCs, HEC is on a 4 year repalcement cycle.	Svcs. & Chgs.					
		Capital Outlay					
		Property Mgmt.					
		Total					
		FTEs					

Project Allocation	Thru 2009	Est 2010	Fiscal Year Planned Appropriations					FY11- FY15	Project Total
			2011	2012	2013	2014	2015		
Assessment									
Design									
Implementation	207	22	24	149	87	87	87	434	663
Total Allocations	207	22	24	149	87	87	87	434	663
Source of Funds									
1800 IT Consolidated EQ Acquisition Fund (EAF)	207	22	24	149	87	87	87	434	663
Total Funds	207	22	24	149	87	87	87	434	663

TIP Tier equals 'Tier 1';

Adopted TIP   Form A

2011-2015 TECHNOLOGY INVESTMENT PLAN ($ Thousands)   **CITY OF HOUSTON - TIP - Library**

Project:	Desktop Refresh - HPL		Category:	Asset Replacement (A/R)		Tier 1		(ADOPTED)

		Project Manager:	Emmnauel Merenini	WBS #: V-1800-2011-03

		Revision Date:	6/30/2010	TIP #: 99-07-34-0001

Description:	Refresh Personal Computers in 5th year or older	**Operational and Maintenance Costs: ($ Thousands)**				
			2011	2012	2013	2014	2015
		Personnel					
		Supplies					
Benefits/ROI:	Personal Computers reach end of useful life software has upgraded	Svcs. & Chgs.					
	and requires newer processors and components.	Capital Outlay					
		Property Mgmt.					
		Total					
		FTEs					

Project Allocation	**Thru 2009**	**Est 2010**	**Fiscal Year Planned Appropriations**					**FY11- FY15**	**Project Total**
			2011	**2012**	**2013**	**2014**	**2015**		
Assessment									
Design									
Implementation	414	131	332	663	400	400	369	2,164	2,709
Total Allocations	414	131	332	663	400	400	369	2,164	2,709
Source of Funds									
1800 IT Consolidated EQ Acquisition Fund (EAF)	414	131	332	663	400	400	369	2,164	2,709
Total Funds	414	131	332	663	400	400	369	2,164	2,709

TIP Tier equals 'Tier 1';

Adopted TIP   Form A

Project:	PLANNING-EGIS		Category:	Project (P)		Tier 1		(ADOPTED)
			Project Manager:	Max Samfield		WBS #: X-700001		
			Revision Date:	6/30/2010		TIP #: 99-07-70-0001		

Description:	The GIS Technology Division includes 13 FTEs supported by revolving fund and 16 FTEs by General Fund. GISTD to design, build, and maintain eGIS; deploy new GIS-based applications and integrate legacy systems/data.	**Operational and Maintenance Costs: ($ Thousands)**				
			2011	2012	2013	2014	2015
		Personnel					
		Supplies	2	2	2	2	3
Benefits/ROI:	Provide information support services for decision makers. Reduce data errors, replication, and maintenance costs. Increase data accuracy, availability, and integration among departments. Enhance service to citizens.	Svcs. & Chgs.	150			75	
		Capital Outlay					
		Property Mgmt.					
		Total	152	2	2	77	3
		FTEs					

Project Allocation	Thru 2009	Est 2010	Fiscal Year Planned Appropriations					FY11-FY15	Project Total
			2011	2012	2013	2014	2015		
Assessment									
Design									
Implementation	1,250	162	400	430	500	500	500	2,330	3,742
Total Allocations	1,250	162	400	430	500	500	500	2,330	3,742
Source of Funds									
1800 IT Consolidated EQ Acquisition Fund (EAF)	1,250	162	400	430	500	500	500	2,330	3,742
Total Funds	1,250	162	400	430	500	500	500	2,330	3,742

2011-2015 TECHNOLOGY INVESTMENT PLAN ($ Thousands)   CITY OF HOUSTON - TIP - Planning and Development

Project:	Desktop Refresh - Planning		**Category:**	Asset Replacement (A/R)	Tier 1	(ADOPTED)

		Project Manager:	Max Samfield	**WBS #: V-1800-2011-03**

		Revision Date:	6/30/2010	**TIP #: 99-11-70-0010**

Description:

Operational and Maintenance Costs: ($ Thousands)

	2011	2012	2013	2014	2015
Personnel					
Supplies					
Svcs. & Chgs.					
Capital Outlay					
Property Mgmt.					
Total					
FTEs					

Benefits/ROI:

Project Allocation	**Thru 2009**	**Est 2010**	**Fiscal Year Planned Appropriations**					**FY11- FY15**	**Project Total**
			2011	**2012**	**2013**	**2014**	**2015**		
Assessment									
Design									
Implementation	34	7	4	11	24	11	7	57	98
Total Allocations	34	7	4	11	24	11	7	57	98
Source of Funds									
1800 IT Consolidated EQ Acquisition Fund (EAF)	34	7	4	11	24	11	7	57	98
Total Funds	34	7	4	11	24	11	7	57	98

Project:	HPD-Mobile Data Strategy	Category:	Project (P)	Tier 1	(ADOPTED)
		Project Manager:	David J. Morgan	WBS #: X-100002	
		Revision Date:	6/30/2010	TIP #: 99-07-10-0002	

Description: Retain a consultant to develop strategy to migrate from HPD's current private proprietary mobile data network to a modern system that will support significantly enhanced operational features. Initiative enables the gathering of internal and external HPD resources to plan for, develop and implement IP-based mobile data communications with enhanced sharing and data access (i.e, images, mapping, browser, magstripes/barcode readers). When implemented this new strategy will allow HPD to take full advantage of the capabilities of the new RMS.

Benefits/ROI: Developing a Mobile Data Stategy will allow HPD to intelligently migrate fo a new mobile system over the next 2-3 years. New system allow capabilities such as limited in car email access, secure web browsers, IP-based communicastions, mapping in patrol cars, digital cameras, thumb print readers, intra-application data transfer and other advanced field communications/features that simply cannot be supported by current wireless network. Will enhance our crime-fighting capabilites and allow officers to be more productive on the streets. Intiative supports Service Improvement and Risk Avoidance.

Operational and Maintenance Costs: ($ Thousands)

	2011	2012	2013	2014	2015
Personnel					
Supplies					
Svcs. & Chgs.		1,000	1,000	1,000	1,000
Capital Outlay					
Property Mgmt.					
Total		1,000	1,000	1,000	1,000
FTEs					

Project Allocation	Thru 2009	Est 2010	Fiscal Year Planned Appropriations					FY11-FY15	Project Total
			2011	2012	2013	2014	2015		
Assessment									
Design									
Implementation			5,120	6,000				11,120	11,120
Total Allocations			5,120	6,000				11,120	11,120
Source of Funds									
1800 IT Consolidated EQ Acquisition Fund (EAF)			1,500	6,000				7,500	7,500
GRANT TBD-HPD Port Authority-Mobile Data Project			3,620					3,620	3,620
Total Funds			5,120	6,000				11,120	11,120

Project:	HPD-Neighborhood Protection Case (NPC) Mgmt System	Category:	Project (P)		Tier 1		(ADOPTED)
		Project Manager:	Assistant Chief Mark Curran		WBS #: X-100003		
		Revision Date:	6/30/2010		TIP #: 99-07-10-0003		

		Operational and Maintenance Costs: ($ Thousands)					
Description:	NPC currently uses a system called FORMS. The original plan was for FORMS to be used until an off the shelf CMS could be funded and purchased. Since this was to be a short term solution the application,the database were developed in house by a single programmer. This situation caused several challenges which include inadequate documentation, single point-of-faliure with the developer, maintenance issues, etc. This project is to determine if FORMS can support NPC's future operations or if a COTS solution would be a better approach. Funding includes the implementation of that decision.		_2011_	_2012_	_2013_	_2014_	_2015_
		Personnel					
		Supplies					
Benefits/ROI:	This is a critical application for COH and supports HPD's business requirements for the utilization of a great number of Community Service Inspectors in the inspection and identification of both commercial and residential hazardous buildings. The upgrade or replacement of this critical application will benefit the City by both avoiding the risk of the system becoming unusable/unmanageable (Risk Avoidance) as well as providing additional functionality (Service Improvement) not available in the internally developed customized application.	Svcs. & Chgs.	100	100	100		
		Capital Outlay					
		Property Mgmt.					
		Total	100	100	100		
		FTEs					

Project Allocation	**Thru 2009**	**Est 2010**	**Fiscal Year Planned Appropriations**					**FY11- FY15**	**Project Total**
			2011	**2012**	**2013**	**2014**	**2015**		
Assessment									
Design									
Implementation	226	200	725	200	200	200	225	1,550	1,976
Total Allocations	226	200	725	200	200	200	225	1,550	1,976
Source of Funds									
1800 IT Consolidated EQ Acquisition Fund (EAF)	226	200	725	200	200	200	225	1,550	1,976
Total Funds	226	200	725	200	200	200	225	1,550	1,976

Project:	HPD-Records Mgmt System (RMS)	Category:	Project (P)	Tier 1	(ADOPTED)
		Project Manager:	Richard Williams	WBS #: X-100010	
		Revision Date:	6/30/2010	TIP #: 99-07-10-0010	

Description:	Replace Unisys mainframe and assorted stand-alone databases/applications across the department. Replaces our current OLO system and moves the department to a modern DOJ compatible integrated criminal justice system. Provides single data entry capability, interface with CAD, personnel systems, courts, prosecution & corrections. Management reports pulled from single database and standardized.

Operational and Maintenance Costs: ($ Thousands)

	2011	2012	2013	2014	2015
Personnel					
Supplies					
Svcs. & Chgs.			451	1,495	
Capital Outlay					
Property Mgmt.					
Total			451	1,495	
FTEs					

Benefits/ROI: This new system will move the department to a much more modern Records Management System. It will allow us to provide improved search capabilities of Offense Reports, improved reporting capabilities to HPD leadership and to outside organizations, enhance data that can go to the vehicles facilitating a mobile office in the car environment, etc. It will also allow us to interface using modern technology with other law enforcement organizations at local, regional, state and national levels. This is a Risk Avoidance initiative because of the age of our COBOL program and the number of retirement eligible programmers currently on staff. We are stagnant in our ability to upgrade programs to keep up with new law enforcement procedures. We must replace our current system to take advantage of newer technology. It also falls into the Service Improvement catagory...we anticipate a significant increase in productivity, but cannot speculate as to the level of gain because we have not yet chosen the system. Some increased efficiency will depend on the City's WiFi initiative and the improvement of our current RDLAP communications system.

Project Allocation	Thru 2009	Est 2010	Fiscal Year Planned Appropriations					FY11- FY15	Project Total
			2011	2012	2013	2014	2015		
Assessment									

Design									
Implementation	7,258	4,882	2,250	3,500	3,500	3,500	2,000	14,750	26,890
Total Allocations	7,258	4,882	2,250	3,500	3,500	3,500	2,000	14,750	26,890
Source of Funds									
1800 IT Consolidated EQ Acquisition Fund (EAF)	7,258	4,882	2,250	3,500	3,500	3,500	2,000	14,750	26,890
Total Funds	7,258	4,882	2,250	3,500	3,500	3,500	2,000	14,750	26,890

Project:	Desktop Refresh - HPD			**Category:**	Asset Replacement (A/R)	Tier 1	(ADOPTED)

				Project Manager:	Patricia Cheesman	**WBS #: V-1800-2011-03**	
				Revision Date:	6/30/2010	**TIP #: 99-11-10-0050**	

Description: Annual replacement of assets based on 5 year replacement cycle for desktops and laptops.

Benefits/ROI: Allows the department to maintain client access devices that are technologically efficient. Without replacing our desktop infrastructure on a regular basis we cannot stay current and run client device software that is supported by our vendors. This initiative supports service improvement and risk avoidance.

Operational and Maintenance Costs: ($ Thousands)

	2011	2012	2013	2014	2015
Personnel					
Supplies					
Svcs. & Chgs.					
Capital Outlay					
Property Mgmt.					
Total					
FTEs					

Project Allocation	Thru 2009	Est 2010	Fiscal Year Planned Appropriations					FY11- FY15	Project Total
			2011	2012	2013	2014	2015		
Assessment									
Design									
Implementation	1,684	396	379	1,434	1,200	1,200	1,200	5,413	7,493
Total Allocations	1,684	396	379	1,434	1,200	1,200	1,200	5,413	7,493
Source of Funds									
1800 IT Consolidated EQ Acquisition Fund (EAF)	1,684	396	379	1,434	1,200	1,200	1,200	5,413	7,493
Total Funds	1,684	396	379	1,434	1,200	1,200	1,200	5,413	7,493

TIP Tier equals 'Tier 1';

Adopted TIP   Form A

2011-2015 TECHNOLOGY INVESTMENT PLAN ($ Thousands)   **CITY OF HOUSTON - TIP - Public Works and Engineering**

Project:	PWE-Water/Wastewater Billing System Disaster Recovery	Category:	Project (P)		Tier 1		(ADOPTED)
		Project Manager:	Dennis Byrd		WBS #: TBD		
		Revision Date:			TIP #: 20-07-20-2005		

Description:	Development and implementation of a remote disaster recovery site.	**Operational and Maintenance Costs: ($ Thousands)**					
			2011	2012	2013	2014	2015
		Personnel					
		Supplies					
Benefits/ROI:	Ensure business continuation: operate the water/wastewater billing system, bill printing and mailing from the remote site within 48 hours after a disaster.	Svcs. & Chgs.	300				
		Capital Outlay					
		Property Mgmt.					
		Total	300				
		FTEs					

Project Allocation	Thru 2009	Est 2010	Fiscal Year Planned Appropriations					FY11-FY15	Project Total
			2011	2012	2013	2014	2015		
Assessment									
Design									
Implementation			300					300	300
Total Allocations			300					300	300
Source of Funds									
8300 PWE-W & S System Operating Fund			300					300	300
Total Funds			300					300	300

Project:	PWE-Advanced Metering Infrastructure		Category:		Project (P)		Tier 1		(ADOPTED)
			Project Manager:		Tommy McClung		WBS #: TBD		
			Revision Date:				TIP #: 20-09-20-0055		

Description: Install concentrators and repeaters that interface with 900 MHz Radio Frequency to transmitting reading to PWE's Water and Wastewater systems.

Benefits/ROI: Increase billing accuracy, reduce customer complaints, improve operational staff efficiency and productivity and identify loss and unaccounted for water.

Operational and Maintenance Costs: ($ Thousands)

	2011	2012	2013	2014	2015
Personnel	140				
Supplies	30	30	30	30	30
Svcs. & Chgs.	275	150	150	150	150
Capital Outlay	400	200	75	75	75
Property Mgmt.					
Total	845	380	255	255	255
FTEs	2.00				

Project Allocation	Thru 2009	Est 2010	Fiscal Year Planned Appropriations					FY11-FY15	Project Total
			2011	2012	2013	2014	2015		
Assessment									
Design									
Implementation			845	380	255	255	255	1,990	1,990
Total Allocations			845	380	255	255	255	1,990	1,990
Source of Funds									
8300 PWE-W & S System Operating Fund			845	380	255	255	255	1,990	1,990
Total Funds			845	380	255	255	255	1,990	1,990

Project:	Desktop / Laptop Refresh - PWE (ENT, SR, EAF)	**Category:**	Asset Replacement (A/R)	Tier 1	(ADOPTED)
		Project Manager:	Dennis Byrd	**WBS #: V-1800-2011-03**	
		Revision Date:	6/30/2010	**TIP #: 20-11-20-3000**	

Description:	Replace outdated desktop and computer components to support changes in business and software requirements.	**Operational and Maintenance Costs: ($ Thousands)**					

			2011	2012	2013	2014	2015
Benefits/ROI:	Maintain a preventive maintenance and component refresh schedule to ensure business owners can maintain a high level of performance.	Personnel					
		Supplies					
		Svcs. & Chgs.					
		Capital Outlay					
		Property Mgmt.					
		Total					
		FTEs					

Project Allocation	**Thru 2009**	**Est 2010**	**Fiscal Year Planned Appropriations**					**FY11- FY15**	**Project Total**
			2011	**2012**	**2013**	**2014**	**2015**		
Assessment									
Design									
Implementation	157	18	647	600	600	600	600	3,047	3,222
Total Allocations	157	18	647	600	600	600	600	3,047	3,222
Source of Funds									
1800 IT Consolidated EQ Acquisition Fund (EAF)	157	18	74	140	140	140	140	634	809
2301 PWE-Building Inspection Fund			82	50	50	50	50	282	282
8300 PWE-W & S System Operating Fund			491	410	410	410	410	2,131	2,131
Total Funds	157	18	647	600	600	600	600	3,047	3,222

Project:	PWE-WiMAX Network Expansion			Category:	Project (P)		Tier 1		(ADOPTED)
				Project Manager:	Justin Ewald		WBS #: TBD		
				Revision Date:			TIP #: 20-11-20-3002		

Description: Expand WiMAX network to further support connectivity requirements for traffic management, water AMR, water and waste water SCADA and security, field access, community broadband, parking pay stations, and T1 replacement for remote facilities.

Benefits/ROI: Improved public safety and quality of life through more effective traffic management. Reduce costs, improve revenue collection, and improve productivity for Utility Customer Service operations. Reduce PWE operating costs by replacing/avoiding commercial T1 lines.

Operational and Maintenance Costs: ($ Thousands)

	2011	2012	2013	2014	2015
Personnel	300	200			
Supplies	50	50	50	50	50
Svcs. & Chgs.	100	100	100	100	100
Capital Outlay	3,840	3,975	360	371	382
Property Mgmt.					
Total	4,290	4,325	510	521	532
FTEs	4.00	3.00			

Project Allocation	Thru 2009	Est 2010	Fiscal Year Planned Appropriations					FY11- FY15	Project Total
			2011	2012	2013	2014	2015		
Assessment									
Design			100	100	100	100	100	500	500
Implementation			4,190	4,225	410	421	432	9,678	9,678
Total Allocations			4,290	4,325	510	521	532	10,178	10,178
Source of Funds									
5040 PWE-Other Government-Grant Funded			3,750					3,750	3,750
8305 PWE-Combined Util. Sys. Fund (Enterprise)			540	4,325	510	521	532	6,428	6,428
Total Funds			4,290	4,325	510	521	532	10,178	10,178

Project:	PWE-Make Ready WiMAX CoLocation			**Category:**	Project (P)		Tier 1	(ADOPTED)

				Project Manager:	Justin Ewald		**WBS #: TBD**	

				Revision Date:			**TIP #: 20-11-20-3003**	

Description: To construct a colocation and operations center for various PWE wireless networks.

Operational and Maintenance Costs: ($ Thousands)

	2011	2012	2013	2014	2015
Personnel					
Supplies					
Svcs. & Chgs.		10	10	10	10
Capital Outlay	256	275	103		
Property Mgmt.					
Total	256	285	113	10	10
FTEs					

Benefits/ROI: Centralize PWE wireless communication center to improve efficiences and effectiveness. Reduce cost for contracted wireless connection.

Project Allocation	**Thru 2009**	**Est 2010**	**Fiscal Year Planned Appropriations**					**FY11-FY15**	**Project Total**
			2011	**2012**	**2013**	**2014**	**2015**		
Assessment									
Design									
Implementation			310	345	213	10	10	887	887
Total Allocations			310	345	213	10	10	887	887
Source of Funds									
8305 PWE-Combined Util. Sys. Fund (Enterprise)			310	345	213	10	10	887	887
Total Funds			310	345	213	10	10	887	887

Project:	PWE-Radio Re-Banding Project		Category:	Project (P)		Tier 1		(ADOPTED)
			Project Manager:	Tom Sorley/ ITD		WBS #: TBD		
			Revision Date:	12/15/2009		TIP #: 20-11-20-3004		

Description:	Per FCC mandate, relocate all (4) system control channels to new FCC provided 800MHz frequencies. Retune or replace 2,854 enterprise radios operating on PWE radio system.	Operational and Maintenance Costs: ($ Thousands)				
			2011	2012	2013	2014	2015
		Personnel					
		Supplies					
Benefits/ROI:	Although rebanding was mandated by the FCC, the City has opted to upgrade the radios to the latest model and software version for about 25% of the cost. This will also make the radios capable of operating on the new 700 MHz radio system when it is constructed.	Svcs. & Chgs.					
		Capital Outlay					
		Property Mgmt.					
		Total					
		FTEs					

Project Allocation	Thru 2009	Est 2010	Fiscal Year Planned Appropriations					FY11- FY15	Project Total
			2011	2012	2013	2014	2015		
Assessment									
Design									
Implementation			4,950					4,950	4,950
Total Allocations			4,950					4,950	4,950
Source of Funds									
8305 PWE-Combined Util. Sys. Fund (Enterprise)			4,950					4,950	4,950
Total Funds			4,950					4,950	4,950

Project:	PWE-Construction Drawing Review		**Category:**	Project (P)		Tier 1	(ADOPTED)
			Project Manager:	Willie Gause		**WBS #:** TBD	
			Revision Date:			**TIP #:** 20-11-20-3005	

Description:	Provide ability for PWE divisions to receive, route, review, and approve construction plans all in an electronic format.	**Operational and Maintenance Costs: ($ Thousands)**					

			2011	2012	2013	2014	2015
		Personnel	70				
		Supplies					
Benefits/ROI:	* Reduce average review time 10%.	Svcs. & Chgs.		45			
	* Reduced required storage space and need to move paper plans from desk to desk during review phase.	Capital Outlay	100				
		Property Mgmt.					
	* Reduced cost to public doing business with COH.	**Total**	170	45			
		FTEs	1.00				

Project Allocation	**Thru 2009**	**Est 2010**	**Fiscal Year Planned Appropriations**					**FY11-FY15**	**Project Total**
			2011	**2012**	**2013**	**2014**	**2015**		
Assessment			50					50	50
Design			100					100	100
Implementation			370	45				415	415
Total Allocations			520	45				565	565
Source of Funds									
2301 PWE-Building Inspection Fund			520	45				565	565
Total Funds			520	45				565	565

Project:	PWE-Map Based Land Mgnt Docs				Category:		Project (P)		Tier 1		(ADOPTED)
					Project Manager:		Willie Gause		WBS #: TBD		
					Revision Date:				TIP #: 20-11-20-3006		

Description:	Present Land Use Management Info in Spatial Environment. Will provide a web based map browser for retrieving spatial information from various data sources.	**Operational and Maintenance Costs: ($ Thousands)**				

		2011	2012	2013	2014	2015
	Personnel	70				
	Supplies					
Benefits/ROI:	Svcs. & Chgs.	215				
Increase employee productivity by significantly reducing the amount of time required to research activities related to land parcels in the COH. Improve decision making by boosting the overall quality and spacial accessibility of available information.	Capital Outlay	100				
	Property Mgmt.					
	Total	385				
	FTEs	1.00				

Project Allocation	Thru 2009	Est 2010	Fiscal Year Planned Appropriations					FY11- FY15	Project Total
			2011	**2012**	**2013**	**2014**	**2015**		
Assessment									
Design									
Implementation			385					385	385
Total Allocations			385					385	385
Source of Funds									
2301 PWE-Building Inspection Fund			385					385	385
Total Funds			385					385	385

Project:	PWE-Static Image Preservation System			Category:	Project (P)		Tier 1		(ADOPTED)
				Project Manager:	Willie Gause		WBS #: TBD		
				Revision Date:			TIP #: 20-11-20-3007		

Operational and Maintenance Costs: ($ Thousands)

Description:	System that will capture, manage, store, preserve, and deliver the varied documents and document types that exist within PWE to meet state preservation mandatory requirements.			2011	2012	2013	2014	2015
			Personnel	70				
			Supplies					
Benefits/ROI:	* Reduction of paper handling and storage		Svcs. & Chgs.			68		
	* Online access to information that was formerly available only on paper		Capital Outlay	100				
	* Security over document access and modification		Property Mgmt.					
	* Provide reliable and accurate audit trail		**Total**	170		68		
			FTEs	1.00				

Project Allocation	Thru 2009	Est 2010	Fiscal Year Planned Appropriations					FY11-FY15	Project Total
			2011	2012	2013	2014	2015		
Assessment									
Design			250					250	250
Implementation			170	450	68			688	688
Total Allocations			420	450	68			938	938
Source of Funds									
2301 PWE-Building Inspection Fund			420	450	68			938	938
Total Funds			420	450	68			938	938

Project:	PWE-Mobility			Category:	Project (P)		Tier 1		(ADOPTED)
				Project Manager:	Oscar Bradford		WBS #: TBD		
				Revision Date:			TIP #: 20-11-20-3008		

Description:	The goals of the project are to provide access to the applications for field based workers in Public Works and Engineering. The backend systems will include INFOR EAM 7i, ILMS, ESRI, City Works, SAP, etc...	**Operational and Maintenance Costs: ($ Thousands)**				
			2011	2012	2013	2014	2015

		2011	2012	2013	2014	2015
	Personnel					
	Supplies					
Benefits/ROI: Provide a mobile solution that will operate on multiple types of devices including MS Windows Mobile based PDAs, laptops, tablets, smart-phones, and can provide blackberry Outlook based functionality as well as customized applications for Blackberry.	Svcs. & Chgs.	180	40			
	Capital Outlay					
	Property Mgmt.					
	Total	180	40			
	FTEs					

Project Allocation	Thru 2009	Est 2010	Fiscal Year Planned Appropriations					FY11-FY15	Project Total
			2011	2012	2013	2014	2015		
Assessment									
Design			30					30	30
Implementation			205	65				270	270
Total Allocations			235	65				300	300
Source of Funds									
8300 PWE-W & S System Operating Fund			235	65				300	300
Total Funds			235	65				300	300

Project:	PWE-Data Retention & Archiving			**Category:**	Project (P)		**Tier 1**	(ADOPTED)
				Project Manager:	Dennis Byrd		**WBS #: TBD**	
				Revision Date:			**TIP #: 20-11-20-3011**	

Description:	This project is to reduce storage cost by reducing direct attached storage per server.	**Operational and Maintenance Costs: ($ Thousands)**				
			2011	2012	2013	2014	2015
		Personnel					
		Supplies					
Benefits/ROI:	Allows the Department to efficiently manage data storage and minimize backup and recovery process for Tier 1 - Tier 3 data. The solution is scalable and provides architecture for future growth and file retention. Improving data access time and user productivity.	Svcs. & Chgs.	50	50	200		
		Capital Outlay					
		Property Mgmt.					
		Total	50	50	200		
		FTEs					

Project Allocation	**Thru 2009**	**Est 2010**	**Fiscal Year Planned Appropriations**					**FY11-FY15**	**Project Total**
			2011	**2012**	**2013**	**2014**	**2015**		
Assessment									
Design			50					50	50
Implementation			950	950	200	100	100	2,300	2,300
Total Allocations			1,000	950	200	100	100	2,350	2,350
Source of Funds									
2301 PWE-Building Inspection Fund			200	150				350	350
8300 PWE-W & S System Operating Fund			800	800	200	100	100	2,000	2,000
Total Funds			1,000	950	200	100	100	2,350	2,350

Project:	MCAD-ICMS HW Replacement/Refresh		**Category:**	Asset Replacement (A/R)		Tier 1		(ADOPTED)

Project Manager:	Rex Billings	**WBS #: TBD**
Revision Date:	4/21/2010	**TIP #: 99-10-16-0016**

Description:	Replace current server system components as existing components are over 5 years old.

Operational and Maintenance Costs: ($ Thousands)

	2011	2012	2013	2014	2015
Personnel					
Supplies					
Svcs. & Chgs.					
Capital Outlay	41	65	65	65	234
Property Mgmt.					
Total	41	65	65	65	234
FTEs					

Benefits/ROI: Funds will be used as neccesary to maintain the existing ICMS environment until the deployment of the new Court system and will protect the revenues collected by the Municipal Courts as the existing hardware was intalled in 2003 and has reached end of life.

Project Allocation	**Thru 2009**	**Est 2010**	**Fiscal Year Planned Appropriations**					**FY11- FY15**	**Project Total**
			2011	**2012**	**2013**	**2014**	**2015**		
Assessment									
Design									
Implementation		225	100	65				165	390
Total Allocations		225	100	65				165	390
Source of Funds									
1800 IT Consolidated EQ Acquisition Fund (EAF)		225	100	65				165	390
Total Funds		225	100	65				165	390

Project:	MCAD-CSMART - Municipal Courts Management System	**Category:**	Project (P)	Tier 1	(ADOPTED)
		Project Manager:	Lambert, Stinnett,Watson	**WBS #: X-160017**	
		Revision Date:	6/30/2010	**TIP #: 99-10-16-0017**	

Description: Design and implement a custom Case Management system for use by Houston Municipal Court.

Benefits/ROI: Successful automation of the labor intensive work performed by Law Enforcement and Municipal Courts Departments (Judicial, Chief Clerk & Legal) with this new System will allow the City to reduce time spent at court for the public, officers and attorneys/bondmen (Service Improvement); increase fine & fee collections (Revenue Increase); contorol long-term system maintenance costs (Expenditure Decrease); and decrease system down-time (Risk Avoidance)

Operational and Maintenance Costs: ($ Thousands)

	2011	2012	2013	2014	2015
Personnel					
Supplies					
Svcs. & Chgs.					
Capital Outlay					
Property Mgmt.					
Total					
FTEs					

Project Allocation	**Thru 2009**	**Est 2010**	**Fiscal Year Planned Appropriations**					**FY11-FY15**	**Project Total**
			2011	**2012**	**2013**	**2014**	**2015**		
Assessment	250								250
Design		6,560	3,000	3,000	1,250			7,250	13,810
Implementation									
Total Allocations	250	6,560	3,000	3,000	1,250			7,250	14,060
Source of Funds									
1800 IT Consolidated EQ Acquisition Fund (EAF)	250	6,560	3,000	3,000	1,250			7,250	14,060
Total Funds	250	6,560	3,000	3,000	1,250			7,250	14,060

Project:	MCAD-Self Service Payment Kiosks			**Category:**	Project (P)		Tier 1		(ADOPTED)

Project Manager:	Jeff Snell	**WBS #: TBD**
Revision Date:	6/30/2010	**TIP #: 99-10-16-0026**

Description: New payment kiosks

Operational and Maintenance Costs: ($ Thousands)

	2011	2012	2013	2014	2015
Personnel					
Supplies					
Svcs. & Chgs.	32	32	32	32	
Capital Outlay					
Property Mgmt.					
Total	32	32	32	32	
FTEs					

Benefits/ROI: Improved Collection and reduced citizen waiting time

Project Allocation	**Thru 2009**	**Est 2010**	**Fiscal Year Planned Appropriations**					**FY11- FY15**	**Project Total**
			2011	**2012**	**2013**	**2014**	**2015**		
Assessment									
Design			35					35	35
Implementation			75	100	100	40		315	315
Total Allocations			110	100	100	40		350	350
Source of Funds									
1800 IT Consolidated EQ Acquisition Fund (EAF)			110	100	100	40		350	350
Total Funds			110	100	100	40		350	350

Project:	MCAD-Desktop Refresh		**Category:**	Asset Replacement (A/R)	Tier 1	(ADOPTED)

Project Manager:	Rex Billings	**WBS #: V-1800-2011-03**
Revision Date:	6/30/2010	**TIP #: 99-11-16-0030**

Description: Prepare for implementation of CSMART by replacing existing PCs with PCs that will support Windows 7

Benefits/ROI: Business necessity to adopt CSMART application. Will facilitate increased revenue and service improvements.

Operational and Maintenance Costs: ($ Thousands)

	2011	2012	2013	2014	2015
Personnel					
Supplies					
Svcs. & Chgs.					
Capital Outlay					
Property Mgmt.					
Total					
FTEs					

Project Allocation	**Thru 2009**	**Est 2010**	**Fiscal Year Planned Appropriations**					**FY11-FY15**	**Project Total**
			2011	**2012**	**2013**	**2014**	**2015**		
Assessment									
Design									
Implementation	199	61	62	150	150	150	165	677	937
Total Allocations	199	61	62	150	150	150	165	677	937
Source of Funds									
1800 IT Consolidated EQ Acquisition Fund (EAF)	199	61	62	150	150	150	165	677	937
Total Funds	199	61	62	150	150	150	165	677	937

Project:	MCAD-Collection Module			**Category:**	Project (P)		Tier 1	(ADOPTED)

		Project Manager:	Rex Billings	**WBS #: TBD**
		Revision Date:	6/30/2010	**TIP #: 99-11-16-0032**

Description: MCA collection activities do not currently use a collection application. Adding this application will improve MCA collection efforts.

Operational and Maintenance Costs: ($ Thousands)

	2011	2012	2013	2014	2015
Personnel					
Supplies					
Svcs. & Chgs.		23	23	23	23
Capital Outlay					
Property Mgmt.					
Total		23	23	23	23
FTEs					

Benefits/ROI: Module will provide MCA collection agents with new tools such as worklists, skip tracing and work flow increasing the rate of collections.

Project Allocation	**Thru 2009**	**Est 2010**	**Fiscal Year Planned Appropriations**					**FY11-FY15**	**Project Total**
			2011	**2012**	**2013**	**2014**	**2015**		
Assessment			25					25	25
Design			25					25	25
Implementation			130					130	130
Total Allocations			180					180	180
Source of Funds									
1800 IT Consolidated EQ Acquisition Fund (EAF)			155					155	155
2207 MCAD-Tech Special Revenue Fund			25					25	25
Total Funds			180					180	180

Project:	IT-INFRA-UCS PBX	Category:	Asset Replacement (A/R)	Tier 1	(ADOPTED)
		Project Manager:	G. Morris/D.Steege / W. Grant	WBS #: X-680000	
		Revision Date:	6/1/3010	TIP #: 99-07-68-0001	

Description:	Service Improvements: Replacement of 27 Legacy PBXs, of which will facilitate modern and unified communications including voice, video and text. Risk Avoidance: The implementation will update the telephone systems to take advantage of the newer technologies while eliminating the potential failures inherent with the unsupport infrastructure and systems. The older systems are at risk for failure without an ability to recover or fail over since the vendors no longer support the systems. Also, third-party support has proven to be problematic, costly and very rarely provides more than a stop-gap measure of recovery.
Benefits/ROI:	Service Improvement: Required technology refresh of unsupported 20+ yr old or high profile problematic systems and equipment. Risk mitigation against lost or reduced services due to systems failure.

Operational and Maintenance Costs: ($ Thousands)

	2011	2012	2013	2014	2015
Personnel					
Supplies					
Svcs. & Chgs.					
Capital Outlay					
Property Mgmt.					
Total					
FTEs					

Project Allocation	Thru 2009	Est 2010	2011	2012	2013	2014	2015	FY11-FY15	Project Total
Assessment									
Design									
Implementation	1,200	800	500	1,000	1,000	1,000	494	3,994	5,994
Total Allocations	1,200	800	500	1,000	1,000	1,000	494	3,994	5,994
Source of Funds									
1800 IT Consolidated EQ Acquisition Fund (EAF)	1,200	800	500	1,000	1,000	1,000	494	3,994	5,994
Total Funds	1,200	800	500	1,000	1,000	1,000	494	3,994	5,994

Project:	IT-INFRA-Active Directory& Exchange Migration		Category:	Project (P)		Tier 1		(ADOPTED)
			Project Manager:	Gary Morris		WBS #: X-680001		
			Revision Date:	6/30/2010		TIP #: 99-07-68-0002		

Description:	Program goal is to upgrade and consolidate the City Windows and Email infrastructure. The program was initially divided into three phases with RED as Phase I and ADEX as Phase II. However, due to complexity and budgetary concerns, Phase III was created to mitigate HPD separately.

Operational and Maintenance Costs: ($ Thousands)

	2011	2012	2013	2014	2015
Personnel	-64				
Supplies					
Svcs. & Chgs.	-70	-70	-70		
Capital Outlay					
Property Mgmt.					
Total	-134	-70	-70		
FTEs	-1.00				

Benefits/ROI: Required. Current versions not supported. Supports modern application integration. Reduces business productivity loss due to incompatible software. Reduced price & Ops cost.

Project Allocation	Thru 2009	Est 2010	Fiscal Year Planned Appropriations					FY11- FY15	Project Total
			2011	2012	2013	2014	2015		
Assessment									
Design									
Implementation	6,962	3,166	1,426					1,426	11,554
Total Allocations	6,962	3,166	1,426					1,426	11,554
Source of Funds									
1800 IT Consolidated EQ Acquisition Fund (EAF)	6,962	3,166	1,426					1,426	11,554
Total Funds	6,962	3,166	1,426					1,426	11,554

Project:	IT-Server Storage/SAN Asset Replacement	Category:	Asset Replacement (A/R)	Tier 1	(ADOPTED)

Project Manager:	Gary Morris / Dan Steege	WBS #: X-680002
Revision Date:	6/30/2010	TIP #: 99-07-68-0003

Description: Annual refresh of the legacy servers/storage for all ITD supported departments based on mfg stated useful life. Includes growth.

Benefits/ROI: Required. Current models not supported. Foundation for server consolidation plans for late 2010, reduces business productivity loss due to device failure and supports effective disaster recovery. Lowers long-term costs. Addresses records retention.

Operational and Maintenance Costs: ($ Thousands)

	2011	2012	2013	2014	2015
Personnel					
Supplies	10				
Svcs. & Chgs.					
Capital Outlay					
Property Mgmt.					
Total	10				
FTEs					

Project Allocation	Thru 2009	Est 2010	Fiscal Year Planned Appropriations					FY11- FY15	Project Total
			2011	2012	2013	2014	2015		
Assessment									
Design									
Implementation	937	475	1,150	1,000	1,000	1,000	1,000	5,150	6,562
Total Allocations	937	475	1,150	1,000	1,000	1,000	1,000	5,150	6,562
Source of Funds									
1800 IT Consolidated EQ Acquisition Fund (EAF)	937	475	1,150	1,000	1,000	1,000	1,000	5,150	6,562
Total Funds	937	475	1,150	1,000	1,000	1,000	1,000	5,150	6,562

Project:	IT-APPS-Call Center (3-1-1 Refresh)		Category:	Asset Replacement (A/R)		Tier 1		(ADOPTED)
			Project Manager:	Stinnett		WBS #: X-681001		
			Revision Date:	6/30/2010		TIP #: 99-07-68-1001		

Description:	This TIP covers only the Call Center costs for Refreshing 3-1-1, expanding Core A fail-over, and upgrading Core B to the current release. CRM funding for the 3-1-1 Refresh is addressed in the CRM TIP request.	**Operational and Maintenance Costs: ($ Thousands)**				
			2011	2012	2013	2014	2015
		Personnel	200	100			
		Supplies					
Benefits/ROI:		Svcs. & Chgs.		55	52		
		Capital Outlay	25	116			
		Property Mgmt.					
		Total	225	271	52		
		FTEs	2.00	1.00			

Project Allocation	Thru 2009	Est 2010	Fiscal Year Planned Appropriations					FY11-FY15	Project Total
			2011	2012	2013	2014	2015		
Assessment									
Design				190				190	190
Implementation	1,633	622	1,000	250	250			1,500	3,755
Total Allocations	1,633	622	1,000	440	250			1,690	3,945
Source of Funds									
1800 IT Consolidated EQ Acquisition Fund (EAF)	1,633	520	1,000	250	250			1,500	3,653
2002 Health-Special Revenue Fund				190				190	190
2207 MCAD-Tech Special Revenue Fund		102							102
Total Funds	1,633	622	1,000	440	250			1,690	3,945

Project:	IT-INFRA-Network Replacement		**Category:**	Asset Replacement (A/R)		Tier 1		(ADOPTED)

Project Manager:	Gary Morris / Wayne Grant	**WBS #: X-096899**
Revision Date:	6/30/2010	**TIP #: 99-09-09-6899**

Description: Risk Avoidance: Annual Refresh of 20% of network equipment serviced by ITD. Refreshed schedule is based on manufacturer's useful life/MTBF statements. Includes network growth. Service Improvement: The refresh plan ensures an "Evergreen" environment with a reduced rate of equipment failure, thus minizing outages due to aged or unsupported equipment.

Benefits/ROI: Reduces the short and long term maintenance costs when combined with "Smart Spare" plan. Service Improvement: Reduces productivity losses due to equipment failures and system outages.

Operational and Maintenance Costs: ($ Thousands)

	2011	2012	2013	2014	2015
Personnel					
Supplies					
Svcs. & Chgs.					
Capital Outlay					
Property Mgmt.					
Total					
FTEs					

Project Allocation	**Thru 2009**	**Est 2010**	**Fiscal Year Planned Appropriations**					**FY11- FY15**	**Project Total**
			2011	**2012**	**2013**	**2014**	**2015**		
Assessment									
Design									
Implementation	300	625	1,000	1,000	1,000	1,500	1,500	6,000	6,925
Total Allocations	300	625	1,000	1,000	1,000	1,500	1,500	6,000	6,925
Source of Funds									
1800 IT Consolidated EQ Acquisition Fund (EAF)	300	625	1,000	1,000	1,000	1,500	1,500	6,000	6,925
Total Funds	300	625	1,000	1,000	1,000	1,500	1,500	6,000	6,925

Project:	IT-APPS-ARA-1-Stop Permitting	**Category:**	Project (P)	Tier 1	(ADOPTED)
		Project Manager:	Al Moran / Stinnett	**WBS #: X-650003**	
		Revision Date:	6/30/2010	**TIP #: 99-09-65-0003**	

Description:	1-Stop Permitting involves integrating multiple back-office applications (like ILMS, Garrison, and POS) into an umbrella application that will enable constituents to conduct their permitting business with the City in the minimum number of steps. The Umbrella application would have public-facing, front-counter, and back-office components

Operational and Maintenance Costs: ($ Thousands)

	2011	2012	2013	2014	2015
Personnel	100	100			
Supplies					
Svcs. & Chgs.					
Capital Outlay					
Property Mgmt.					
Total	100	100			
FTEs	1.00	1.00			

Benefits/ROI:	RI: Reducing the number of trips/steps/interfaces required to transact business with the City should increase the level of compliance and the value of fees collected. SI: Reducing the number of trips/steps/interfaces required to transact business with the City should reduce the amount of effort required by citizens to transact

Project Allocation	**Thru 2009**	**Est 2010**	**Fiscal Year Planned Appropriations**					**FY11-FY15**	**Project Total**
			2011	**2012**	**2013**	**2014**	**2015**		
Assessment									
Design									
Implementation	697		500	300	200			1,000	1,697
Total Allocations	697		500	300	200			1,000	1,697
Source of Funds									
1800 IT Consolidated EQ Acquisition Fund (EAF)	697		500	300	200			1,000	1,697
Total Funds	697		500	300	200			1,000	1,697

Project:	ITD-ERP-SAP Business Intelligence	**Category:**	Project (P)	Tier 1	(ADOPTED)
		Project Manager:	Lambert/Grant	**WBS #: X-681009**	
		Revision Date:	6/30/2010	**TIP #: 99-09-68-1009**	

Description:	This project will include the purchase and implementation of the remaining Business Intelligence components of Rapid Marts developed by SAP.

Operational and Maintenance Costs: ($ Thousands)

	2011	2012	2013	2014	2015
Personnel					
Supplies					
Svcs. & Chgs.					
Capital Outlay					
Property Mgmt.					
Total					
FTEs					

Benefits/ROI: This return will include the automation of Comprehensive Annual Financial Report reporting and other financial reports that includes only the general ledger data files.

Project Allocation	**Thru 2009**	**Est 2010**	**Fiscal Year Planned Appropriations**					**FY11-FY15**	**Project Total**
			2011	**2012**	**2013**	**2014**	**2015**		
Assessment									
Design			400					400	400
Implementation	1,143	1,664	515					515	3,322
Total Allocations	1,143	1,664	915					915	3,722
Source of Funds									
1800 IT Consolidated EQ Acquisition Fund (EAF)	1,143	1,664	915					915	3,722
Total Funds	1,143	1,664	915					915	3,722

Project:	IT-RADIO-700 MHz Public Safety Radio System Project			Category:	Project (P)		Tier 1		(ADOPTED)
				Project Manager:	Tom Sorley / Chris Grasso		WBS #: X-687000		
				Revision Date:	1/5/2010		TIP #: 99-09-68-7000		

Description:	Radio Communication System - This project will replace existing system for Police, Fire, Public Works and Engineering, and Aviation Departments with one centrally managed system.	**Operational and Maintenance Costs: ($ Thousands)**				
			2011	2012	2013	2014	2015

Operational and Maintenance Costs: ($ Thousands)

	2011	2012	2013	2014	2015
Personnel					
Supplies					
Svcs. & Chgs.					
Capital Outlay					
Property Mgmt.					
Total					
FTEs					

Description: Radio Communication System - This project will replace existing system for Police, Fire, Public Works and Engineering, and Aviation Departments with one centrally managed system.

Benefits/ROI: Existing systems have reached end of life. New state of the art system will dramatically increase reliability, coverage, capacity, and interoperability.

Project Allocation	Thru 2009	Est 2010	**Fiscal Year Planned Appropriations**					FY11- FY15	Project Total
			2011	2012	2013	2014	2015		
Assessment									
Design									
Implementation	16,317	14,142	34,177	24,364	45,672			104,213	134,672
Total Allocations	16,317	14,142	34,177	24,364	45,672			104,213	134,672
Source of Funds									
8012 HAS-AIF Capital Outlay Fund (Enterprise)			3,043					3,043	3,043
8305 PWE-Combined Util. Sys. Fund (Enterprise)			3,181	3,610	3,505			10,296	10,296
Radio-Anticipated Grants			1,764	20,754	7,409			29,927	29,927
Radio-Existing CIPs	3,324	2,742	2,800		25,135			27,935	34,001
Radio-Existing Grants	12,993	11,400	23,389					23,389	47,782
Radio-General Fund PIBs					9,623			9,623	9,623
Total Funds	16,317	14,142	34,177	24,364	45,672			104,213	134,672

Project:	IT-INFRA-Data Center & Server Transformation		Category:	Project (P)		Tier 1		(ADOPTED)
			Project Manager:	Gary Morris		WBS #: X-682016		
			Revision Date:	6/30/2010		TIP #: 99-10-68-2016		

Description: Assess core and distribution data centers, IT service management processes, and city-wide server inventory. Effort includes comparing city cost of IT data center and server services to external market-place to identify cost savings opportunities and to assess sourcing alternatives defined as outsourcing, in-sourcing or some hybrid scenarios. Perform an assessment of alternatives for data center and server consolidation to enhance city-wide IT data center and server management that includes disaster recovery capabilities, reduction in operating costs, and improved service levels.

Benefits/ROI: This project will lead to an effective disaster recovery capability for the first time in the City's history involving two centers with redundancy and a cold off-site location further inland as a back-up site. The ROI involves economies of scale related to server consolidation and virtualization, as well as, avoidance of system outages of critical public safety and public service systems during emergency management events and will also result in improved service delivery.

Operational and Maintenance Costs: ($ Thousands)

	2011	2012	2013	2014	2015
Personnel		-560	-565	-570	
Supplies		-975	-978	-980	
Svcs. & Chgs.					
Capital Outlay					
Property Mgmt.					
Total		-1,535	-1,543	-1,550	
FTEs		-6.70	-6.70	-6.70	

Project Allocation	Thru 2009	Est 2010	Fiscal Year Planned Appropriations					FY11- FY15	Project Total
			2011	2012	2013	2014	2015		
Assessment									
Design									
Implementation		342	1,000	1,000	1,000	1,000	2,000	6,000	6,342
Total Allocations		342	1,000	1,000	1,000	1,000	2,000	6,000	6,342
Source of Funds									
1800 IT Consolidated EQ Acquisition Fund (EAF)		342	1,000	1,000	1,000	1,000	2,000	6,000	6,342
Total Funds		342	1,000	1,000	1,000	1,000	2,000	6,000	6,342

Project:	Automated Time & Attendance System (Kronos)		**Category:**	Project (P)		Tier 1		(ADOPTED)

	Project Manager:	Al Moran / Don Pagel	**WBS #:** X-650010
	Revision Date:	6/30/2010	**TIP #:** 99-11-65-0010

Description: System will allo the City to centralize and track the attendance and pay for all City employees - Fully automated time and attendance system which includes the software licensing, system hosting, application development and implementation services - Deliverables include Multiple T&A devices, Application Hosting, SAP Interface, Education/Training and ongoing maintenance

Benefits/ROI: TBD by Project Manager

Operational and Maintenance Costs: ($ Thousands)

	2011	2012	2013	2014	2015
Personnel					
Supplies					
Svcs. & Chgs.	162	799	799	637	637
Capital Outlay					
Property Mgmt.					
Total	162	799	799	637	637
FTEs					

| **Project Allocation** | **Thru** **2009** | **Est** **2010** | **Fiscal Year Planned Appropriations** | | | | | **FY11-** **FY15** | **Project** **Total** |
			2011	**2012**	**2013**	**2014**	**2015**		
Assessment									
Design									
Implementation			8,354					8,354	8,354
Total Allocations			8,354					8,354	8,354
Source of Funds									
1800 IT Consolidated EQ Acquisition Fund (EAF)			8,354					8,354	8,354
Total Funds			8,354					8,354	8,354

Project:	IT-INFRA-Desktop Refresh-ITD & NON-CTO Depts			**Category:**	Asset Replacement (A/R)		Tier 1		(ADOPTED)

Project Manager:	Gary Morris/P. Suber/M. Housley	**WBS #: V-1800-2011-03**

Revision Date:	6/30/2010	**TIP #: 99-11-68-1100**

Description:	Annual Refresh of 20% of desktops serviced by ITD. ITD currently supports 11 City Departments.

Operational and Maintenance Costs: ($ Thousands)

	2011	2012	2013	2014	2015
Personnel					
Supplies					
Svcs. & Chgs.					
Capital Outlay					
Property Mgmt.					
Total					
FTEs					

Benefits/ROI:	Reduces business productivity loss due to outages/downtime from incompatible/unique desktop configurations required for modern applications. Better pricing.

Project Allocation		**Thru 2009**	**Est 2010**	**Fiscal Year Planned Appropriations**					**FY11- FY15**	**Project Total**
				2011	**2012**	**2013**	**2014**	**2015**		
Assessment										
Design										
Implementation		1,601	438	1,888	589	783	750	750	4,760	6,799
Total Allocations		1,601	438	1,888	589	783	750	750	4,760	6,799
Source of Funds										
1800 IT Consolidated EQ Acquisition Fund (EAF)		1,601	438	1,888	589	783	750	750	4,760	6,799
Total Funds		1,601	438	1,888	589	783	750	750	4,760	6,799